

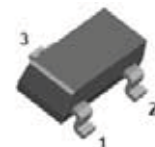
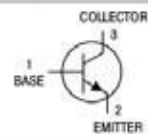
Silicon Epitaxial Planar Transistor: BCX19

Features:

- High current (500mA)
- Low voltage (45V)

Applications:

- General purpose amplifiers
- Saturated switching and driver applications
- Complement: BCX17



SOT-23

Ordering Information

Type No.	Marking:	Package Code:
BCX19	U1	SOT-23

Maximum Ratings & Characteristics: Tamb=25°C unless otherwise specified

Parameter:	Symbol:	Value:	Unit:
Collector - Base Voltage	V_{CBO}	50	V
Collector - Emitter Voltage	V_{CEO}	45	V
Emitter - Base Voltage	V_{ebo}	5	V
Collector Current - Continuous	I_C	500	mA
Collector Current - Peak	I_{CM}	1	A
Total Power Dissipation	P_{TOT}	250	mW
Thermal Resisittance, Junction to Ambient	$R_{\theta JA}$	417	°C/W
Junction and Storage Temperature	T_j, T_{stg}	-65 to +150	°C

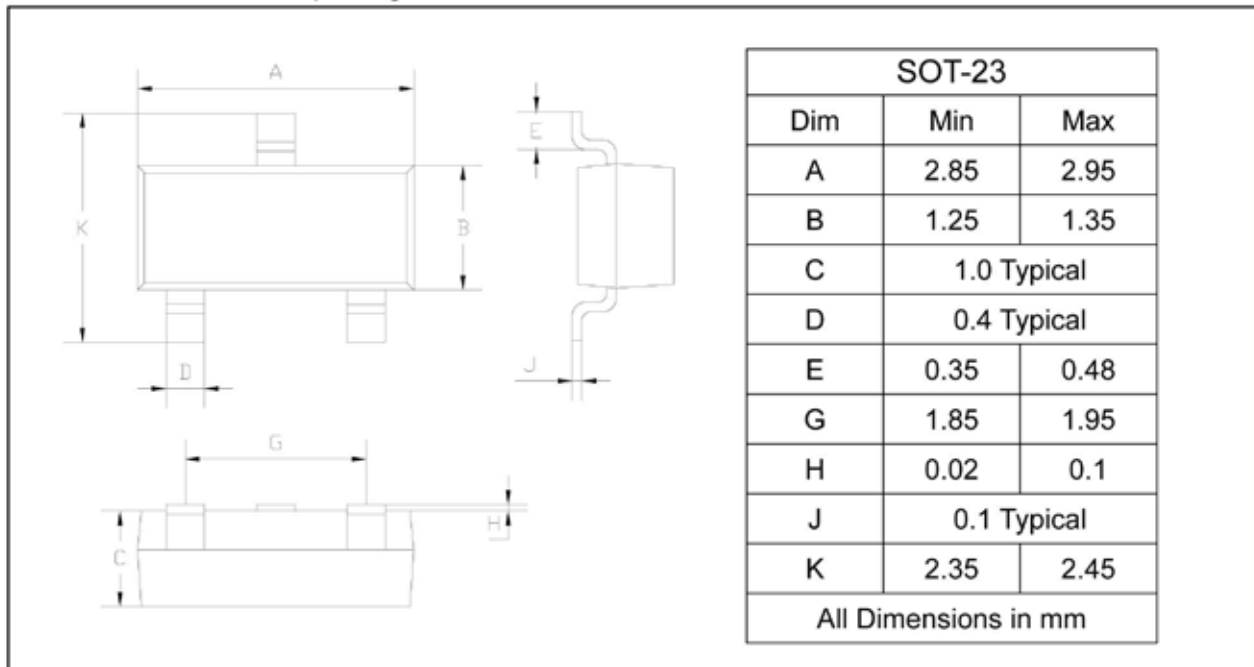
Electrical Characteristics: Tamb=25°C unless otherwise specified

Collector - Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	50		V
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	45		V
Emmitter - Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	5		V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -20V, I_E = 0$		0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$		0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 1V, I_C = 100mA$ $V_{CE} = 1V, I_C = 300mA$ $V_{CE} = 1V, I_C = 500mA$	100 70 40	600	
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		0.62	V
Base Emitter Voltage	V_{BE}	$I_C = -500mA, V_{CE} = -2V$		1.2	V
Transition Frequency	f_T	$V_{CE} = 5V, I_C = 10mA,$ $f = 100MHz$	100		MHz

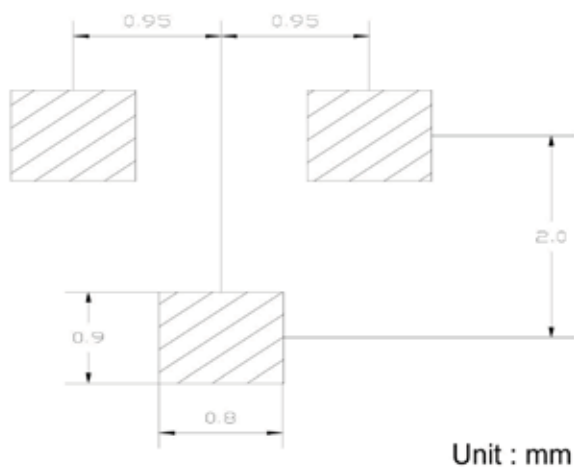
Package Outline

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BCX19	SOT-23	3000/Tape&Reel